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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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JANUARY 1987

SUMMARY

With only slight growth in gasoline deliveries and a slackening in the rate of increase for residual fuel oil, January's growth in total deliveries was somewhat less than that experienced during the latter half of last year. For a number of reasons, the 4.1 percent, 657 thousand B/D rise in total deliveries as calculated against the Department of Energy's figure for last January is significantly larger than likely consumption increases. First, last January's figure was understated by about 200 thousand B/D due to treatment of new inventory data for that month. Second, falling prices a year ago provided a strong incentive for distributors and end users to postpone purchases, causing deliveries in that month to fall by perhaps 200 to 300 thousand B/D from prior trends. Once adjustment is made for these factors, this January's increase would likely have been only 1 or 2 percent, contrasting with the 1986 second-half increase now calculated at 3.4 percent with the inclusion of somewhat surprising Department of Energy data for November.

Gasoline deliveries' meager 0.2 percent rise was at least partly due to weather-related road conditions, and residual fuel oil deliveries also rose less rapidly than in the recent past because of reduced fuel switching. However, weather colder than last year helped to raise distillate deliveries, and kerosine jet fuel continued its strong growth with an 11 percent year-to-year increase.

An increase in Alaskan crude oil production of nearly 150 thousand B/D, at least partly due to recent completion of longer-term development projects, only partially masked a decline in lower 48 production of about 830 thousand B/D. The nearly 700 thousand B/D decline for the U.S. as a whole was even larger than most of the year-to-year declines in the price-controlled 1970s. Imports, up over 1 million B/D from last January, continued in the 6.2 to 6.5 million B/D range of the past several months, with the entire increase accounted for by crude oil.

Total stocks fell 13 million barrels, less than usual for January, in contrast to the fourth quarter's more-than-seasonal decline. Emphasis on gasoline production at refineries, combined with the small increase in deliveries, helped to boost gasoline stocks by 15 million barrels, over 10 million barrels more than the average January increase of recent years. Distillate stocks, as well, declined by only half the typical amount; crude stocks rose slightly.

PRODUCTS SUPPLIED[1/]

Gasoline

WEATHER SLOWS GASOLINE DELIVERIES... Gasoline deliveries' minimal 0.2 percent increase for January contrasts with growth in the latter half of 1986 now estimated at 3.5 percent. Unusually heavy snows in the highly-populated East, resulting in snow cover ranging from 15 to 30 inches or more from Virginia northward, slowed less essential travel in those regions in the latter part of the month.

However, January's small increase follows a December rise that was not much larger than 1 percent; it may well be that gasoline deliveries' strong upward trend during the last half of 1986 has been moderating somewhat, though not by as much as the past two months' deliveries data suggest. In fact, latest data on the growth in miles travelled do not correlate with monthly Department of Energy data, to which API data are benchmarked. Recent increases in miles travelled have been running around 5 percent, and even allowing for offsetting fuel efficiency improvements, consumption growth of at least 3 percent is indicated.

Retail gasoline prices rose about 5 cents per gallon for the month but were still roughly only three quarters of the level immediately preceding last year's price decline. The average cost of crude oil to refiners increased on the order of 14 cents per gallon since July as world prices rose in response to OPEC efforts to reduce production; however, retail gasoline prices in January averaged at most 5 to 6 cents higher than July's. Even taking into account a roughly 5-cent-per-gallon historical seasonal decline for retail prices between July and January, much of the recent increase in crude oil costs has evidently not been passed through.

Surprisingly, 1986's lower gasoline prices apparently did not alter the size distribution of car sales dramatically last year. Although for the year's domestic sales, the market share of intermediate-and-larger cars rose about a percentage point, increased imports, which are weighted towards smaller vehicles, probably more than offset the domestic size increase. However, since 1981, when gasoline prices peaked, larger cars have gained some 7 points in market share to reach nearly 43 percent of the total.

Distillates

...BUT INCREASES HEATING OIL USE. January's distillate deliveries jumped 7.4 percent (241 thousand B/D) compared with the year-ago deliveries as reported by the Department of Energy, though actual consumption probably grew only 3 percent or

less. One reason for the difference is that the year-ago deliveries figure was understated by about 95 thousand B/D as a result of the method used to incorporate new inventory data in the Department's reporting system, as noted above. Adjusting for this, distillate deliveries' January growth amounts to about 4.4 percent—still somewhat more than for indicated consumption.

Weather for the month averaged about 5 percent colder than a year ago, adding an estimated 50 thousand B/D to consumption compared with January 1986. Growth in trucking activity, if it continued at the fourth quarter's 3 percent average rate, would have added roughly 40 thousand B/D more. With little strength in rail traffic or other sectors, this leaves more than one third of January's (adjusted) deliveries increase unexplained by consumption changes. However, distillate deliveries have regularly varied from indicated consumption on a short-term basis in the past year as shifting crude oil price levels on world markets have served to encourage swings in nonprimary inventories, inventories which are not tallied by API or the Department of Energy. Over the longer term, deliveries tend to match consumption more closely. For the past six months, distillate deliveries' growth has averaged about 1.5 percent.

Residual Fuel Oil

FUEL SWITCHING MODERATES. Though residual fuel oil deliveries rose 10.3 percent (148 thousand B/D) in January, this was one of the smaller increases of the past ten months, the result of apparent slackening in fuel switching. Residual fuel oil prices, paralleling crude oil prices, fell in early 1986, reaching about half their December 1985 level by midyear. Because of the cost advantage compared to natural gas, many of those with dual fuel capability, particularly electric utilities, switched to residual fuel oil. Natural gas prices also slipped in the first half of 1986, but by less than prices for residual fuel oil.

From midyear to this January, residual fuel oil prices have risen significantly, particularly in the past two months, while any increase in natural gas prices has been much less. As a result of these price movements, January's residual fuel oil prices relative to natural gas in many markets were about where they were before the 1986 price decline, or even somewhat higher, so that some switching back to natural gas may well have occured.

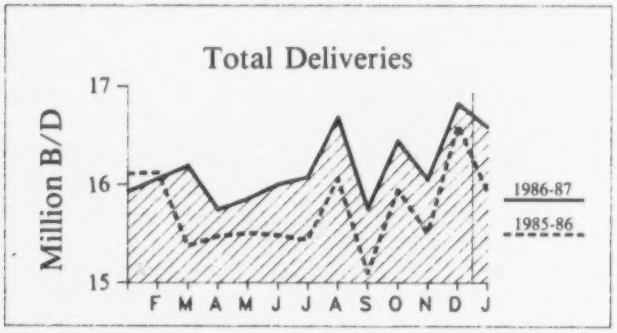
Kerosine Jet Fuel

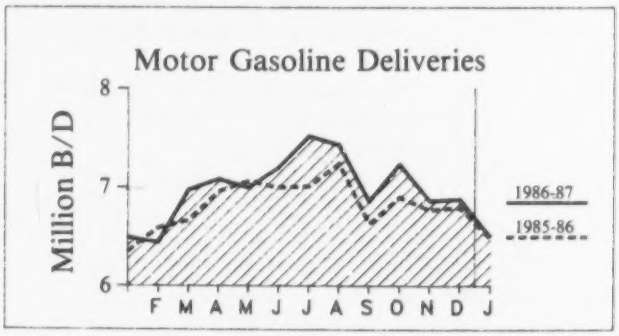
11 PERCENT INCREASE ON TREND. Kerosine jet fuel deliveries rose 11 percent or nearly 120 thousand B/D in January, in line with recent increases in commercial airline traffic. In recent months, growth rates in available seat miles on international flights have begun to recover from last summer's flat performance, though their 7 to 8 percent increases still fall short of growth rates of 12 to 13 percent for domestic flights.

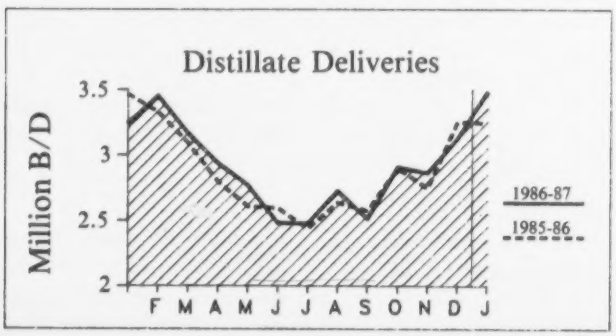
Other Oils

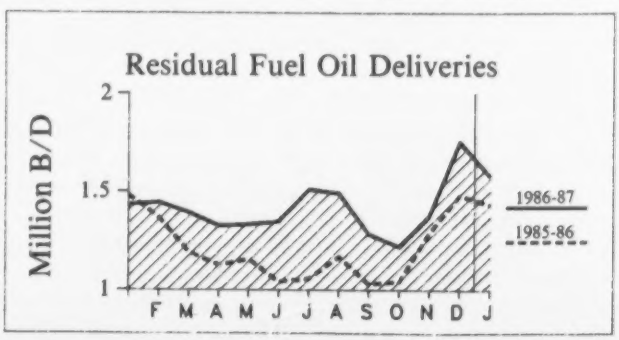
FLAT FOR JANUARY. Deliveries of other oils rose a bare 0.2 percent January, continuing the flat results experienced in 1986. The same relative price patterns of oil versus natural gas that have slowed or reversed switching to residual fuel oil at electric utilities have affected developments for some of these products as well. Higher prices of crude oil relative to natural gas have caused some movement back to lighter petrochemical feedstocks, such as ethane and propane, from heavier gasoil and naphtha feeds.

Meanwhile, delays in passage of a Federal highway bill had more effect on state contruction planning for later in the year than on January asphalt deliveries, since only about 3 percent of annual deliveries normally occur in that month. The bulk of asphalt usage, more than 70 percent, typically occurs during May through October when weather in many parts of the country is more hospitable.









SUPPLY[1/]

Production

DOWN NEARLY 700 MBD DESPITE ALASKAN INCREASE. Lower 48 production declined about 830 thousand B/D year-to-year in January, or over 11 percent. Even with an increase in Alaskan production of nearly 150 thousand B/D, the decline for the U.S. as a whole still amounted to close to 700 thousand B/D, larger even than most of the year-to-year declines of the price-controlled 1970s. Roughly two thirds of the decline for the lower 48 has taken place in the major producing states of Texas, Louisiana, and California, in line with these states' share of production. Year-to-year declines, based on preliminary data, have been running 10 to 14 percent in Texas, about 9 percent in California, but generally only a few percent in Louisiana. For the remaining lower 48 states as a whole, the drop has averaged 12 to 14 percent.

In Alaska, however, where natural field declines expected in the next few years have not yet been a major factor, development projects begun before last year's price slide have helped to maintain or even increase production. Start-up of Lisburne production and the bringing on stream of an additional production facility at Kuparuk late last year helped to boost this January's production for Alaska.

Natural gas liquids production is estimated to have declined 8 percent or nearly 140 thousand B/D compared with January of last year. Reduced extraction rates and lower natural gas production both contributed to the decline.

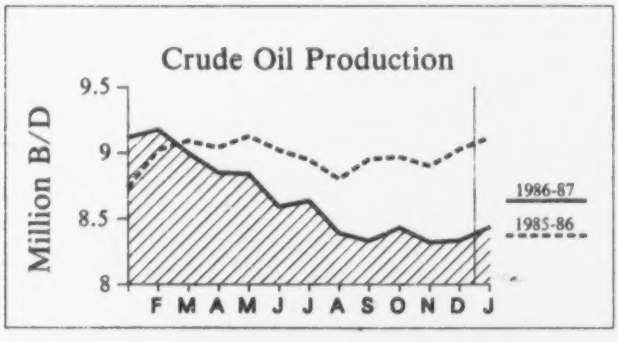
Imports

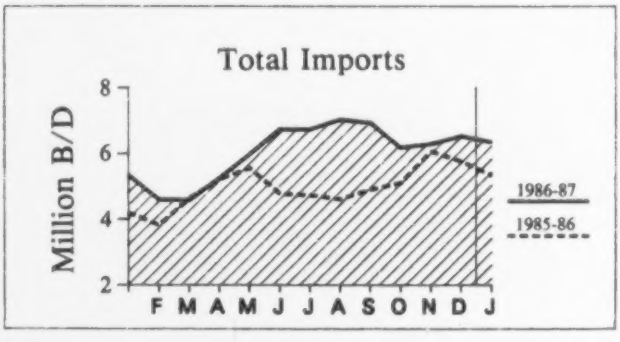
UP 1 MILLION B/D. January's total imports, at over 6.3 million B/D, continued at rates similar to those of the past several months. The entire year-to-year increase of 1.0 million B/D was for crude oil, with product imports steady. However, last January's increase in inventories (about 9 million barrels after adjustment for the Department of Energy's addition of new inventory data) was highly unusual for a month in which stocks have almost always declined. Without the additional imports to build stocks last January, that month's imports would have been lower and the year-to-year increase for January of this year consequently larger.

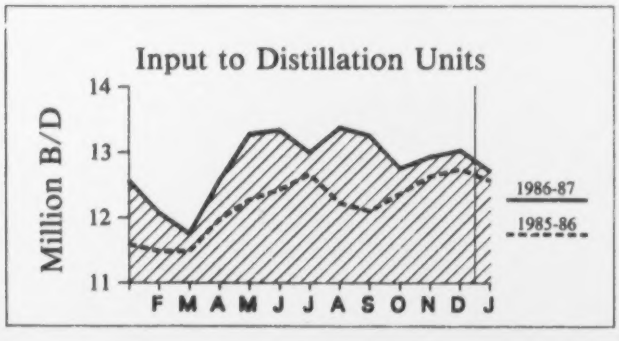
Both gasoline and distillate imports were down somewhat from last January (about 40 thousand B/D for gasoline and blending components, 30 thousand B/D for distillate), but this is mainly a reflection of last year's higher-than-usual imports. Residual fuel oil imports, however, rose over 110 thousand B/D as high demand for this fuel, as with last year, continued to be met largely by increased imports. In 1986, though residual fuel oil deliveries rose over 200 thousand B/D, domestic refinery production was nearly unchanged. Increased imports of over 130 thousand B/D, accompanied by reduced exports of about 60 thousand B/D, were the primary means by which higher demand was met.

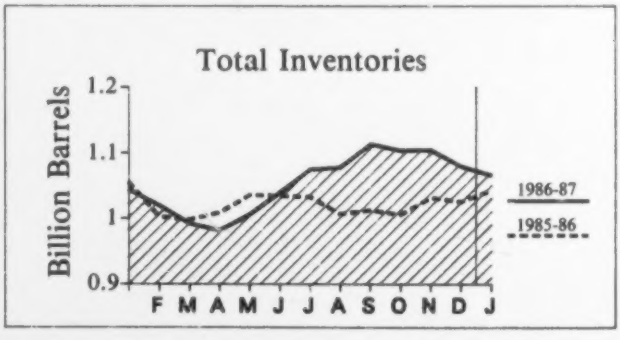
Refinery Operations

REFINERS EMPHASIZE GASOLINE PRODUCTION. Refinery utilization as a percentage of operable capacity continued at the highest rates in seven years, rising 1.4 points in January from a year ago to 81.5 percent. Though down seasonally from last summer's higher rates, this was still the highest for January since 1980. With distillate supplies currently adequate, greater attention was given to gasoline production, which rose 3.4 percent due to higher-than-typical yields for January. Distillate production was off about 1 percent compared to last January's higher-than-normal output but 240 to 280 thousand B/D greater than production in the prior two Januarys.









Inventories

DOWN LESS THAN USUAL FOR JANUARY. Contrasting with the fourth quarter's larger-than-normal stock draw, total stocks declined about 20 million barrels less than usual for January, falling only about 13 million barrels. As a result of higher refinery output and lower growth in January's deliveries, gasoline stocks rose 15 million barrels, compared to an average 4 million for recent prior years. Distillate stocks' decline of 12 million barrels was also only about half the historical average. Crude stocks, however, rose, but only slightly. Despite the less-than-typical inventory draw for the month, closing inventories were only 21 million barrels (2 percent) higher than a year ago.

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 515 million barrels as of January 31, 1987).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	JANUARY			YEAR-TO-DATE		
	1987[1]	1986[2]	% Change	1987[3R]	1986[2]	% Change
Products Supplied:						
Total motor gasoline	6,502	6,487	0.2			
Finished leaded motor gasoline*	1,786	2,083	(14.3)			
Finished unleaded motor gasoline*	4,716	4,404	7.1			
Naphtha-jet	183	203	(9.9)			
Kerosine-jet	1,197	1,078	11.0			
Distillate fuel oil	3,484	3,243	7.4			
Residual fuel oil	1,583	1,435	10.3			
All other oils[4]	3,993	3,984	0.2			
Reclassified[5]	- 359	- 504	(28.8)			
Total domestic products supplied	16,583	15,926	4.1			
Exports	817	853	(4.2)			
Total products supplied	17,400	16,779	3.7			
Supply:						
Domestic production:						
Crude oil[6]	8,437	9,121	(7.5)			
Natural gas liquids	1,584	1,721	(8.0)			
Other supply[7]	614	1,255	(51.1)			
Total domestic supply	10,635	12,097	(12.1)			
Imports:						
Crude oil, total	4,281 10/	3,277 10/	30.6			
Canadian	614	496	23.8			
Other	3,667	2,781	31.9			
Products, total	2,057	2,057	-			
Residual fuel oil	741	629	17.8			
Other	1,316	1,428	(7.8)			
Total imports	6,338	5,334	18.8			
Total supply	16,973	17,431	(2.6)			
Stock change, all oils	- 427	+ 652	XXXX			
Refinery Operations						
Input to crude oil distillation units	12,708	12,564	1.1			
Operable capacity	15,594	15,687	(0.6)			
Refinery utilization (%)[8]	81.5%	80.1%	1.7			
Crude oil runs	12,511	12,375	1.1			

Stocks (millions bbls.)	1987	1986	1986[2]	% Change from ...	
	Jan. 31[9]	Dec. 31[9]	Jan. 31	Previous Month	Year Ago
Crude oil 10/	329.1	326.9r/	331.9	0.7	(0.8)
Unfinished oils	94.9	95.0r/	105.1	(0.1)	(9.7)
Total motor gasoline**	252.1	237.1r/	239.0	6.3	5.5
Finished leaded motor gasoline*	70.5	67.9	81.6	3.8	(13.6)
Finished unleaded motor gasoline*	140.9	130.3r/	119.9	8.1	17.5
Naphtha-jet	7.4	7.0	6.5	5.7	13.8
Kerosine-jet	41.9	42.1	35.1	(0.5)	19.4
Distillate fuel oil	141.0	153.4r/	139.0	(8.1)	1.4
Residual fuel oil	41.9	43.3r/	48.1	(3.2)	(12.9)
All other oils	158.4	175.1r/	141.0	(9.5)	12.3
Total all oils	1,066.7	1,079.9r/	1,045.7	(1.2)	2.0

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source:
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.